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THE STRUCTURE, FUNCTIONS AND PATHOLOGY OF THE SPLEEN

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IN a course of Lectures in Brown University, in which institution I was professor of Anatomy, Surgery and Physiology, prior to the year 1820, in treating of the collatitious viscera of digestion, I considered the liver, pancreas and spleen to be biliary organs; that their cöoperation is indispensably necessary to the production of bile suitable for the purposes of the animal economy; that this position is founded on the similarity of their structural diseases, demonstrable from cadaveric autopsies in the dissecting room and in private practice; that these viscera are sometimes found enlarged and softened, and sometimes shrunk and somewhat hardened; that we have seen them, at the same time, of a proportionate size and scirrhous, on the one hand; and on the other of enormous magnitude—the spleen extending to the right iliac region as far as the anterior and superior spinous process of the ileum, and the anterior margin of the liver descending several inches below the right cartilaginous border of the false ribs in a patient who had never been exposed to the influence of malaria, and therefore it is presumed their size was not the result of vitiated structure, but preternatural or morbid growth; that, in these instances, the uniformity of their dimensions and consistence is sufficient to show their functions all tend to the same issue; that these organic changes are found only in diseases of long standing. I also considered, that the collatitious viscera are biliary organs may be deduced from their functional diseases; that the spleen not only secretes the bitter principle, but is the seat of the intermittent fever; that the liver not only secretes bile, but is the seat of fevers varying in their type according to the tissue affected; that the parenchyma is the seat of bilious fever, and the mucous membrane of the pori biliarii is the part of the digestive apparatus on which the virus of the yellow fever in its most malignant form exerts its baleful influence; that the peritoneal coat of this viscus is the seat of hepatitis; that the bilious fever and the intermittent may be reciprocally modified; that when the bilious fever is violent or of long duration, the function of the spleen becomes disturbed, and reacts upon the liver, whence occurs a mixed fever of the nature of the bilious and remittent, and, finally, losing its original character, it degenerates into the intermittent; that when the intermittent is violent, or of long continuance, it may so disorder the functions of the liver as to produce, in the first place, a bilious remittent, and ultimately a continued bilious fever; that the functions of the liver and pancreas, spleen and stomach, are connected with each other rather through the medium of the circulation, than by the instrumentality of the nerves.

The above positions have received countenance and support from ulterior observations in the anatomy, physiology and pathology of these viscera, as the following quotations will show, particularly with respect to the spleen and liver.

At a recent post-mortem examination, the liver and spleen were of their usual size, but of a lax texture; their convex surfaces were shriveled, of a leaden hue, and thickly studded with small tubercles. No notice was taken of the pancreas, which is the case in by far the greater number of dissections.

"In the fatty transformation of the liver, this viscus and the spleen were found soft." HEYFELDER—*Lancet*. Here, assuredly, no reference is made to the pancreas.

"Malpighi and Kièl suspected the functions of the spleen had relation to the secretion of bile."—*Dictionnaire des Sciences Médicales*.

"Among other symptoms of inflammation of the spleen, jaunisse [ictère] is mentioned."—*Ibid*.

"That the spleen is an auxiliary organ of the liver, and destined to prepare a certain quantity of the blood of the vena portæ."—BICHAT.

Disease of the Liver and Spleen.—"The case of diseased liver and spleen occurs in a little girl, eleven years of age, who is said to have been always ill. The first symptoms observed by the friends were jaundice. At present she has merely an aguish tint of skin, but a yellowness is decidedly observable in the eyes. She is rather thin, but not particularly ill, and goes about. The left lobe of the liver can be particularly felt *indurated*, there being a *sharp* horizontal margin in the left hypochondrium. The spleen is likewise *indurated* and also enlarged, and its edge may be felt *sharp* and hard, and a slight fluctuation may, with care, be discovered. I could not discover any external cause of this disease. She is said never to have had ague, nor any particular disease, nor to have lived where malaria is known. Whether her mother had had ague I do not know; but lately I saw a twin infant with a distinctly enlarged and indurated spleen, which had been born in London, but whose mother some time before had suffered from ague in the country. This infant became pale and emaciated and died, and on opening it I found the spleen enlarged, hard and compact, but otherwise of a healthy appearance. At the examination of the body, the mother mentioned that the other twin was beginning to fall off, and on examining the abdomen it was found that its spleen had begun to enlarge and was indurated, and this child will die of precisely the same complaint as the first." ELLIOTSON—*Lancet*.

In the rapid advances that have been made in the various subjects of medical science, the spleen has not been overlooked; by their investigations modern physiologists have thrown great light on its structure—its functions—its pathology—its connections—its treatment—its uses.

STRUCTURE.—As the spleen lies deeply ensconced in the left hypochondrium, and is in the vicinity of important organs, the symptoms of its maladies are involved in great obscurity; and, therefore, it becomes proper to give a more particular description of its situation and connections, as well as form, than otherwise would be necessary.

This viscus is of a triangular form; according to the observations of Prof. Dupuytren and M. Assollant, its average length is four inches and a half, and its thickness two and a half. "It has three faces, three margins, and two extremities." The external face is smooth and comes in contact with the serous membrane that lines the diaphragm, and is elliptical to conform to the concavity in which it lies; internally there are two faces, the anterior and posterior, each having two depressions, the former corresponding to the cardiac extremity of the stomach, the latter to the kidney and capsula renalis. It has three margins, an anterior, posterior, and internal; the last is the shortest of the three, in which there is a sulcus perforated with foramina for the transmission of branches of the splenic artery and vein, denominated *the fissure of the spleen;* the two former are sometimes notched, particularly the anterior. It has two extremities, the one posterior and inferior, the other anterior and superior; the former is obtuse and thick, the latter acute and thin. The anterior extremity is directed towards the umbilicus, and in an enlargement of the spleen the apex may be felt emerging from the hypochondrium near the extremity of the tenth rib.

The spleen is invested with two membranes, the serous and fibrous. The serous is formed by a reflection of the peritoneum: the ligament, extending from the stomach to the spleen, by which the two organs are connected together, is composed of a duplicature of the peritoneum, the leaves of which, when it approaches the internal margin, separate and are reflected over the viscus, constituting its external coat. Between the leaves is interposed cellular tissue, and between which passes the splenic artery,[*] sending off the vasa brevia to be distributed to the great extremity of the stomach; it is also attached to the diaphragm by a fold of the peritoneum. The external surface of the outer membrane of this viscus, like other serous surfaces, is smooth, and secretes a lubricating fluid to obviate the effects of friction; the internal surface, through the medium of cellular tissue, is adherent to the external surface of the fibrous membrane.

The fibrous membrane has two surfaces, the external and internal. The external is so closely attached to the inner face of the serous coat, it is difficult to separate them; the internal is contiguous to the substance of the spleen. Processes of this membrane enter the foramina of the fissure, forming sheaths through which the branches of the splenic artery and vein, accompanied with cellular tissue, are transmitted to every part of the spleen; fibrous prolongations are also sent in, from its inner surface, which are expanded into cells; these are filled with a bibulous tomentum of the ultimate, or capillary, ramifications of the splenic vein. It is this substance that renders the mass of the spleen soft and spongy.

The spleen is "highly elastic," and it appears from certain morbid enlargements that its distensibility is immense; "Cette distension, dans ce cas, est moins l'effet de l'élasticité que l'effet des proprietés vitales."

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[*] The splenic vein and its divisions accompany the artery and its branches.

This viscus is generally somewhat of the color of blood, varying in intensity in subjects of different ages; it is sometimes of a "deep blue."

From the experiments made by professional gentlemen in whose ability and fidelity we may repose the utmost confidence, the cellular structure of the spleen may be considered as fully established.

If you inflate, says Malpighi, the spleen of a sheep or a calf and let it dry, and cut it as soon as it is dry, you will find that the whole mass is composed of cells similar to those of the honeycomb.

"Si vous remplissez de vent, dit Malpighi, un rate de brebis ou de veau, et que vous la laissiez sèche, et qu'ensuite vous la coupiez aussitôt qu'elle sera sèche, vous trouverez que toute la mass est composée de membranes pleines de celles semblable à celles qu'on remarque dans les rayons de meil des abeilles."—*Dictionnaire des Sciences Medicales.*

On the Structure and Functions of the Spleen. By Sir A. Cooper.—"The following is an extract of Sir A. Cooper's opinions on the structure and use of the spleen; which were delivered by him to the anatomical class, in a lecture upon that viscus.

"After a few preparatory observations on the figure and relative situation of the spleen, Sir A. Cooper proceeded to speak of its structure; he said, that in addition to the partial peritoneal coat covering the spleen, it possessed a proper and peculiar covering, or capsule, which, however, did not merely form a coat to the spleen, but processes of this membrane, which he termed septa, or cords, were sent through its substance, by which means the two surfaces of the covering were united. Sir Astley remarked that this membrane was *highly elastic*, and to this fact he begged particular attention. Proceeding next to speak of the internal structure of the spleen, he said that he considered the opinion of those who contended that the spleen was cellular, was undoubtedly true, and, in confirmation of this, he would appeal to the various preparations of this viscus then before him. The splenic artery, he said, was given off from the cœliac, and after distributing branches to the pancreas, the left side, and cardiac end of the stomach, passes into the substance of the spleen and divides very minutely; the artery does not in itself (said Sir Astley) form the cells, but the branches ramify on the cells. The most curious part of the structure of the spleen, he observed, was in the veins, and here Sir A. exhibited to the class the spleen of an ox, and also of a calf, in which the distribution and the commencement of the veins were well seen. He compared the internal structure of these preparations with a dried preparation of a turtle's lung, and said that the similarity was so great, that the lung had been laid upon the table by mistake, for a preparation of the spleen. The cells of the spleen, Sir Astley remarked, were formed in the splenic vein, into which the blood is poured from the minute capillary branches of the splenic artery. In order to illustrate the elasticity of the membrane, or proper capsule of the spleen, Sir Astley introduced a pipe into the splenic vein, and then inflated the spleen; it readily admitted of distension, and its size was much increased, but was immediately emptied by its own elasticity. By means of an injecting syringe he threw water into the veins of a spleen; upon withdrawing the syringe, and holding the viscus in the hand, it was seen to empty itself and resume its original size. The spleen upon which the experiment was shown appeared very small, but it held twenty-four ounces of fluid. These were my playthings, gentlemen (said the worthy baronet, with a good-natured smile), when I was ill in the country last summer, and I will tell you the results of those investigations, or rather the conclusions I have arrived at respecting the use of the spleen; and it is this;—the spleen is an elastic reservoir and manufactory of venous blood.

"Sir A. said the blood was conveyed into the cells formed by the splenic vein, and was there retained until a supply of dark venous blood is demanded for the liver, when, by the elasticity of the investing membrane of the spleen, its contents are propelled. The blood in the splenic vein becomes additionally charged with carbon, and forms dark blood, which is necessary to form bile. Sir A. remarked that the difference between the lungs and spleen was this—that in the former the blood was deprived of its carbon, whilst in the latter it received an additional quantity. In the spleen of the reptile class, and also in birds, he observed, there were vessels in lieu of cells, and it is only in quadrupeds that the cells can be ascertained.

"Sir Astley Cooper next alluded to the hypothesis of Dr. Haighton upon the use of the spleen, which was, that when the stomach was full it pressed upon the spleen, and thus impeding the circulation through that viscus, the blood was more copiously propelled to the arteries of the stomach, in order that a larger quantity of gastric juice might be secreted. Sir A. said if such were the use of the spleen to the stomach, it must also serve for a similar purpose to the pancreas; but he admitted that it remained for further investigation to prove what other offices the spleen performed, in addition to that which he conceived to be its principal use."—*Lancet.*

Another view of the anatomy of the spleen—which in my opinion does not necessarily militate with its cellular structure—is contained in the following extract.

"M. Andral, Jr., a gentleman well known as one of the first pathologists in France, has lately announced a discovery which he has made, concerning the circulation of the spleen. The splenic artery, at its termination, is perforated with numerous small holes, which pass immediately into the spongy tissue of this organ. A similar structure exists in the veins. These opinions are substantiated by anatomical preparations."—*Ibid.*

Function.—One of the offices of the spleen is the secretion of the bitter principle, to effect which the structure of the splenic apparatus, having all the requisites of a secreting organ, seems to be peculiarly adapted. The splenic artery takes its rise from the cœliac, and passes along the posterior margin of the pancreas, until it approaches the spleen, when it divides into several branches, to each of which, after it has entered the substance of this viscus, is appended a cluster of ramifications, each cluster having an independent circulation; and while its vessels have a free communication with each other, they do not anastomose with the clusters of the other branches. Each portion of the spleen has likewise its own set of vessels, by which it is supplied with blood, and by which it is exclusively nourished, so that there may be a structural disease of several portions, while the rest are sound.

In the first periods of the formation of the embryo, the rudiment, or rudiments, of the spleen is seen to resemble a clot of blood, which by rubbing between the fingers may be easily crushed, and which gradually acquires consistence until the term of gestation be completed, when traces of organization begin to appear, and in process of time the splenic apparatus is completely formed.*

Each branch of the splenic artery acting independently, will enable us to account for the existence of a number of spleens; because the branches to which are attached several portions of the spleen, when they do not grow *pari passu*, will not coalesce, but remain disunited and constitute separate spleens; and when they do coalesce, their development may be so far incomplete as to leave notches in the circumference of the spleen.

The splenic vein—a branch of the vena portæ—when it approaches the spleen, is divided into several branches, which are transmitted with those of the artery to every part of this viscus. The ultimate branches of the splenic artery are ramified on the cells, while these are filled with the radicles of the vein in the form of minute granulations.†

The precise manner in which the circulation is performed, does not appear to be correctly ascertained. Perhaps, after it has remained in the capillary arteries a sufficient time to have undergone its appropriate changes, the blood exudes through the pores, or, according to the discovery of M. Andral, Jr., "through the holes in the sides of the arteries," into the cells, to be imbibed by the radicles of the splenic vein. There appears to be no immediate communication of the artery with the vein, as air cannot be forced through the artery into the vein, nor into the cells, nor is it known that it escapes from it; on the other hand, air cannot be forced into the artery by inflating the vein, but, without any unusual effort, the cells are filled with air, and the spleen swells up and is enlarged. By making a puncture through the integuments into the body of the spleen, and inserting a blowpipe, the whole viscus may be inflated. Hence it may be inferred there is a communication between the extremities of the veins and cells, and between the cells themselves.

(To be continued.)

VESICO-VAGINAL FISTULA.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—In my last letter to you, I am not certain whether I informed you that I had succeeded in relieving a case of vesico-vaginal fistula of most unpromising character. If I have not made such intimation to you, I will now state, that I operated in August, 1838. The opening had existed three years, was fully as large as half a dollar, and had, at the time I treated it, a large fungous growth protruding from the mucous membrane of the bladder through it, which greatly embarrassed the operation. I was enabled to gain admission to the fistulous opening through a hollow conoidal speculum of proper size and length; through it the operation was executed. The margins at the opening were denuded with curved scissors, using hooks to draw out the portions to be removed. In closing the opening, I employed an instrument similar to the one I constructed for cleft palate, for introducing the ligatures from the vesical surface, and the leaden wire was used as the means of suture. Only one operation was required. Six sutures were introduced; and it was only necessary to tighten them once after the operation. In three weeks the wires were removed, and a firm and perfect union was found to have taken place between the edges of the opening. A short silver tube was kept constantly in the urethra for four weeks. The patient, at the date of this note, is well—nearly two years since the operation was performed.

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* Dictionnaire des Sciences Médicales. † Ibid.

I should think my case the first one successfully treated in this country, as it preceded Dr. Hayward's nearly a year. Please inform me on this subject, and how many have been treated in the United States. I have two other cases of this disgusting infirmity under treatment, which I think will soon be relieved. Every case cured or relieved should be communicated to the public; as well as of ununited lacerations of the perineum. Indeed, I have thought the newspapers the proper vehicles for such information, as they circulate more extensively, and might in that way present the information to individuals too delicate and modest to make known their situations, believing them incurable; and preferring concealment, and seclusion from society, rather than expose an incurable and disgusting infirmity. Yours, &c.

Pr. Edw. C. H., Va., March 25, 1840. John P. Mettauer.

CASE OF TETANUS.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—On the night of March 13th, I was called to Erastus Ferguson, aged 16, the hired man of a farmer. Exactly a week before, he had accidentally thrust the tine of a pitchfork through the toe next the little one, of his right foot. For several days after, he complained much of soreness in the wound, and was unable to wear his shoe. He however kept about in the cold weather, with his foot clouted in woolen cloths. The pain, the swelling, the soreness, the tenderness, and almost the entire feeling, had now, however, left the injured part; insomuch, that at my first visit the toe looked pale, shrunk, bloodless, and altogether like that of a dead man. I seized it between my thumb and finger and gave it a smart squeeze, but without his flinching or complaining in the least. And that there was less sensibility in it than in his well toes, I ascertained by giving one of them a like pressure.

The first indication of approaching mischief—i. e. of trismus—in this patient, was similar to what I had before observed in other similar cases, viz., a frequent gaping or yawning; the jaws being primarily threatened, even when they do not lock. This gaping was succeeded by spasms in the stomach, pain in the back part of the head, and cramp in the upper limbs. He had taken, by domestic prescription, one dose of 50 drops of laudanum, and another of 25 drops, before my arrival. I found it necessary, however, to increase the opiate treatment in order to control the pain; and, as in all cases of the kind, falling under my care, local applications, in order to bring back the soreness to the injured part, were not neglected. For this purpose a mixture of tinct. cantharides and oil of turpentine was used, applied on cotton so as to surround the toe. This brought back some degree of sensibility, but the smarting induced was but slight, nor the soreness so great as was wished. Next day, therefore, I resorted to tartar-emetic ointment of quadruple strength. This article, however, entirely failed of producing the least effect whatever; and on the third day I surrounded the toe with empl. cantharides, which I knew to be of first-rate quality, but, strange as it may seem, without producing the least vesication, sensation or redness. I now returned to the first application—tinct. of cantharides and oil of turpentine. Meantime, I found the spasms to yield to pills composed of opium, sugar of lead and camphor, mixed with Peruvian balsam. Nor do I know any formula so much to be depended on in cases of the kind. Indeed, I consider the best musk, or any other articles of the antispasmodic class, as an inferior adjuvant to opium, to these. Still, as the case demanded the most energetic treatment, from its severity and danger, I did not omit the external application to the head, jaws, and region of the stomach, of an article which of late has become a great favorite of mine in nervous and spasmodic affections. This is the *cyanuret of potassium,* in the proportion of from eight to twelve grains to an ounce of water. It is certainly a most noble remedy in nervous headache, and other pains from spasm, especially *tic douloureux,* in which dolorific malady it has done much.

But to return to the case of tetanus. My patient has been now for more than two weeks free from spasms, and is well, except some remaining debility, which the disease has a surprising and rapid tendency to induce. It ought to be noticed, that the bowels from atony, and the constipating effects of the acetate of lead and opium, refused to be moved by common cathartics. Castor oil, combined with the oil of turpentine, which Dr. Dewees thought one of the most certain cathartics, had no effect. But castor oil, combined with calomel, and made into pills with crumb of bread, completely succeeded. Nor do we possess a more stimulating aperient, or one so well adapted to diseases of this class.

What is tetanus? I answer, that traumatic tetanus appears to be a metastasis, from the wound to the head, stomach, limbs and jaws, attended with pain, spasms, sometimes convulsions, and locking of the jaws. These distressing symptoms are to be palliated by the means already noticed; particular attention being paid, at the same time, to induce action—inflammation and soreness—in the seat of the injury, which is better than even amputating the part, where this is possible.

Cases of tetanus, in my practice, have been few and far between; and as I recollect, have been very rarely related in your interesting Journal, to which I have become so much attached that I hail its weekly visits with pleasure. Dr. Thomas, who, some thirty years ago, stood at the head of practical writers, and who had had much experience in tetanus, writes of it thus: "When tetanic affections arise in consequence of a wound, puncture or laceration, they are almost sure to prove fatal, as I never but once met with a recovery under such circumstances, during a very extensive practice and long residence in the West Indies."* Many years past I had a case very similar to the one which I have now detailed, which ended in recovery, with much danger, delay and difficulty—and, as I now think, from my not then having known all the remedial agents which I used in this case, which I have now submitted to your disposal. JOSEPH COMSTOCK.

Lebanon, Ct., March 30th, 1840.

ENLARGEMENT OF THYMUS GLAND.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I herewith send you the following extracts from my note-book, relating to a case which some time since came under my observation. Should you think it worthy of notice, you are at liberty to dispose of it as you please. Respectfully yours,

Oxford, Me., March 30, 1840. J. M. TEWKSBURY, M.D.

The subject of the following case, aged 34, by occupation a cooper, of temperate habits, naturally robust constitution, came under my notice about a year before his death. He dates the first commencement of his illness in the autumn of 1836, when he found it difficult to pursue his customary employment in consequence of a sense of fulness in the head and face, occasional dizziness, and difficulty of breathing. His previous health, as ascertained from himself and relatives, had been generally good, except that he had, four or five years before, lung fever, during which, and shortly previous to the attack, his face and neck were observed to be much swollen. When he first came under my observation, the following symptoms were present. His first appearance was that of robust health—countenance fresh and full, pulse strong and active—complains of excessive languor, vertigo, severe paroxysms of palpitation and dyspnœa, especially on making any extra exertion or ascending a hill; inferior extremities greatly emaciated; appetite pretty good; pulse varying in volume and frequency, and at times intermitting; no cough; no established pain in chest; face, neck and integuments of the head have the appearance of being greatly puffed with air; ears and lips at times livid; the superficial veins of neck and right side of the thorax enormously distended; at one time I witnessed some upon the right and anterior side of the thorax, the calibre of which, in many places, could not have been less than one inch.

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* Modern Practice of Physic. By Robert Thomas, M.D. Page 268.

The above symptoms continued, with but little alteration, till within about eight weeks of his death, when he had successively repeated attacks of well-characterized pneumonia, which were at first successfully relieved by the usual course of treatment; but they continued to grow more aggravated—profuse bloody and puriform expectoration ensued, and death occurred in April, 1838. It is proper, however, to remark here, that the extreme varicosity of the thoracic and intercostal veins became gradually diminished in the course of the disease, to nearly their normal size.

Post-mortem Examination, thirty-six hours after death. Present, Drs. J. Tewksbury and Millett.—Thorax uncommonly large, percussion ant. flat. In attempting to remove the sternum and cartilages, I found it extremely difficult without the application of considerable force and dissection, in consequence of the firm and unnatural adhesions contracted with the parts underneath. This being detached and turned upward upon the face, our attention was unexpectedly engaged with the almost bony firmness of a large, unyielding tumor, occupying the whole ant. mediastinum. I found it impossible to prosecute the dissection farther, without detaching a portion of the ribs and removing the contents of the thorax entire. The lungs were firmly attached to the pleura costalis throughout the whole cavity, except at the sup. third of right lung. The tumor had displaced the sup. right portion of the left lung, and was so intimately imbedded in its substance, and so firmly attached to the right and ant. face of the heart, that it was impossible, in the short time allowed for the examination, to separate it by dissection; in fact, it appeared gradually to mingle itself with the substance of the lung at this place, so that the lung for some extent presented the firm and indurated nature of the tumor. The descending cava was entirely surrounded by the tumor just before it enters the auricle, and so much contracted as scarcely to admit the finger. On cutting into the right auricle posteriorly, a large protuberance was observed, projecting inwardly from its anterior parietes, of the size and shape of a half English walnut, which being incised, presented the same homogeneous nature of the tumor, and was continuous with its substance, every trace of the intervening wall of the auricle being obliterated. The inferior extremity of the vena azygos was much larger than natural, readily admitting the little finger. Right lung greatly engorged, easily broken when pressed between the fingers. Left lung slightly hepatized at inferior lobe. Bronchia filled with thick, viscid, bloody mucus. Heart somewhat dilated and flaccid. Abdominal organs appeared unimpaired. Contents of the head not examined.

The tumor occupied in length the whole of the sternum, and extended up the neck as far as the thyroid gland. It extended from the sternum backward to the vertebral column, to which it was firmly attached, including in its substance the vessels and bronchia. Beneath the sternum it measured laterally a little more than four inches, its inferior extremity being lobulate and resting against the diaphragm. Externally it was firm anteriorly, presenting on incision an indurated or cartilaginous appearance. Internally it was marked throughout with small cavities, containing a semifluid or cream-like pus.

This case excited considerable interest among the practitioners in the vicinity for several months previous to its termination, the patient having consulted many of the most eminent members of the profession. Much speculation also existed in reference to the true nature and diagnosis of the disease. Most, however, from existing symptoms, were ready to conclude upon some organic derangement of the heart or large vessels, and promised him but temporary relief in medicine. Dissection has demonstrated that this opinion was not altogether unfounded. At the time of examination some doubt was also entertained whether the tumor had its origin in the thymus gland. The fact of this gland becoming atrophied naturally in after life, and not unfrequently entirely obliterated, together with its intimate attachments to the heart and lung—presenting the appearance as if it were a growth from these parts—and also the rare notice by authors of enlargement of the thymus gland, especially in adults, could not fail to afford opportunity for some speculation. Yet the circumstance of the inferior extremity being lobulate, and its general resemblance internally to the structure so frequently noticed in the enlarged thymus of children, affords some reason for pronouncing it an enlargement of the thymus gland. One pathological circumstance, worthy of observation in the history of the above case, exists in the varicosity of the thoracic and intercostal veins, and their gradual diminution after the first stages of the disease, in opposition to the bloated and puffed appearance of the face, which continued throughout the whole course of the disease. From this symptom we are led to suppose that the blood in its ordinary course through the sup. cava was impeded by the accumulating pressure of the tumor, and that the blood which naturally flows from the intercostal veins through the vena azygos into the sup. cava, was also obstructed in the first instance, producing thereby the varicose enlargement. Subsequently it formed a retrograde current in the vena azygos, through the inferior vena cava into the auricle.

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BOSTON, APRIL 15, 1840.

AN INCOMPETENT PROFESSOR.

It seems that Dr. J. B. Flint, the professor of surgery in the Louisville Medical Institute, formerly of this city, has been arraigned before the trustees on a charge of incompetency as a teacher in his department, at the instance of an associate. He survived the trial, however, and those of the faculty most intent on the business of getting their late favorite out of the chair, must have been deeply mortified at their want of success.

There is no slander in saying, openly, that a certain medical despot has been indulged in his propensity to rule in medical schools quite long enough. No one was ever more devotedly attached to another, than Dr. Flint has been to the man who would now tread him under foot. Probably he dared to say or do something on his own account, and this produced an explosion of that magazine of vengeance which has belched forth every few years, to the manifest terror of those who supposed that it was useless to stand up for rights against such mighty power as unsuppressed vanity, obtrusive self-esteem, and braggadocio effervescence of contempt for every man who does not bow down in worship before the great Æsculapian Moloch of Kentucky.

"Too much praise," says the Louisville Advocate, "cannot be given to the Board of Managers for the faithful and patient manner in which they conducted the investigation; and for the impartial attention they bestowed upon every part of the scrutiny. Their verdict has been ratified by the people, so far as we have heard them speak on the subject. This, always gratifying, must be peculiarly so in this instance.

"The decisions of the Board of Managers upon several questions, connected with the government of the school, are so important in their bearing upon its future prosperity, that we put them on file for future reference. The first is, 'that no professor of the school, nor any number of them, is justified in seeking out a candidate for a chair in the school until a vacancy is announced to the Board of Trustees, nor can any professor be permitted to pledge himself to a gentleman whom he wishes to be a candidate for a chair, that the Board shall be *sounded* before the name is presented, in order to know certainly whether he will be elected.' This we think must cut off much intrigue and management.

"Secondly—'If the members of the medical class shall attempt any rude or indecent behavior to the professors, in the charge of their duty, such members shall be expelled from the Institution, and their infamy published to the world.' This important rule of the managers should be well remembered by the professors and pupils.

"Thirdly—'If any member of the Faculty shall refuse to put his name to the diploma of a young man who has passed his examinations, when directed by the Board of Managers to sign it, his chair shall be vacated.'"

New York Hospital.—From a report made to the Legislature, which is an uncommonly interesting document, on account of the accuracy of its statistical details, we learn that in 1839, *two thousand and forty-one persons received medical and surgical treatment* at the New York Hospital. Of this vast number, 1,402 were cured; 146 relieved; 77 discharged at their own request; 44 discharged as improper objects; 29 eloped, or discharged as disorderly; 169 died; and there remained under medical care, Dec. 30th, 1839, when the report seems to have been made, 174 patients.

In the Bloomingdale Asylum, or Insane Hospital, 113 were admitted during the past year, who, with the 138 left in the institution at the close of 1838, made a total of 251 cases of insanity under medical and moral management in 1839. Of this number, 68 were cured; 32 improved; 11 were discharged at the request of friends; 14 died, and 126 remained at the time of making the report. The whole number of recent cases of insanity discharged during the year, was 62.

After making the above gratifying statements of the success of the two departments, the governors, through their president, make an equally satisfactory exposé of the financial condition of the hospital. They seem to have a plenty of money, which is spent in the spirit of true benevolence, for the immediate good of the sick poor; comprising the unfortunate of all nations. Drs. Francis U. Johnston, Joseph M. Smith, John B. Beck, and James Macdonald, are the attending physicians. There are also six surgeons, all equally distinguished for success in operative surgery. Dr. Valentine Mott is still a consulting surgeon—although he has not been in the United States for years, nor is he expected back very speedily. Now this is perfectly farcical. Why not make a consulting surgeon of a man who is on the ground ?

The entire expenditures of the hospital, in 1839, were $33,936 54.

In the Asylum, William Wilson, M.D., is the physician, with a salary far below his deserts, as in most other medical offices in this country.

On the whole, all that belongs to the government of the hospital, must meet the approbation of an intelligent, philanthropic community.

Baltimore College of Dental Surgery.—Whether this is the first school of dentistry ever established for the express purpose of public instruction, we know not; but it is certain that the one just chartered by the Legislature of Maryland, is the first in America. A dental faculty has been appointed, and after attending two courses of lectures, &c., the student, provided, as in other cases, he sustains an examination, is to have conferred upon him the degree of *doctor of dental surgery*. The chairs are thus filled: Dr. H. H. Hayden, Professor of *Dental Physiology and Pathology;* Dr. H. W. Baxley, Professor of *Anatomy and Physiology;* Dr. C. A. Harris, Professor of *Practical Dentistry;* and Dr. T. E. Bond, Jr., Professor of *Special Pathology and Therapeutics.*

Medical Testimony.—As a general rule, the singular discrepancies of medical men, before courts of justice, in relating what they consider facts, together with the singular clashings of their opinions upon subjects in which it would seem impossible that there should be any difference of judgment, has long since convinced gentlemen of the law that but little value is to be placed on medical testimony, where any obscurity in the case is admitted to exist. We strongly recommend to our professional brethren to read an article in the 12th No., Vol. 2, of the Law Reporter, edited by P. W. Chandler, Esq., illustrative of these remarks. In Boston there are two law periodicals; viz., the Reporter, and the American Jurist and Law Magazine. The latter is conducted by W. Sumner, L. S. Cushing and G. Hillard, Esqs. Both publications afford profitable reading for the medical profession. Occasional papers on medical jurisprudence appear in them, which should be as familiar to us as to the members of the bar. In a word, we recommend both of these works to the patronage of all practitioners in the New England States, who desire to be competent to answer plain questions before a jury.

Italian Publications.—A large package from Italy was received last week, containing recently written pamphlets on medicine, surgery, &c., together with reports of various institutions. Some of them have the following titles. Statistica Medica della Real Casa Dei Matti di Palermo; Ragguaglio di Un Viaggio Medico falto in Toscana, &c. Una Speunacchiata ai Due Pappagalli; Analyse Critique de l'ouvrage de M. le Docteur Sichel; Storia di due cosi D'Allacciatura D'Arterie; Ceuni Sulle Forze Medicatrici Della Natura e Specialmente Sull' Abuso Del Salasso Memoria, &c. del Dottore Ferro, &c. &c. Some of them may be useful as references, but would hardly compensate in interest for the trouble of translation.

Massachusetts State Lunatic Hospital.—From the last annual report, we learn that there have been in the hospital, in the course of the last year, 397 patients—195 males and 202 females. There remained at the close of the preceding year, 218; and there were admitted, in 1839, 179. At the close of the year 229 remained. The hospital has been full at all times, and 115 applications have been rejected. The number admitted was greater than during any preceding year, and the number of residents greater by 35. There were discharged in the course of the year, including deaths, 168. Of these, 80 recovered, 29 were improved, 7 not improved, 30 discharged as harmless and incurable, and 22 have died. The deaths the past year amounted to 5½ per ct. of the patients in the hospital during the year; and since the establishment of the hospital, the deaths have been 7¼ per ct. of the whole number of admissions. The recoveries for the whole time have been 54 per ct. of the males, and 62 per ct. of the females. Intemperance is assigned as the cause of the largest number of cases of insanity the past year, as has been the case in former years. We shall make room, in another number, for Dr. Woodward's remarks on hereditary predisposition to insanity, which, from such a source, are entitled to consideration.

Fifty-first Report of the Hanwell Lunatic Asylum.—The report extends to three quarters of a year, and ends on the 30th September, 1839. The Asylum contained 321 males, and 470 females, on the 1st of Jan., and 329 males, and 462 females, on the 30th September. The average number of patients in the Asylum was 804. In the 9 months 84 males and 48 females were *admitted;* 38 males, and 27 females, were *cured;* 3 males and 5 females were discharged, *relieved;* and 35 males, and 24 females, *died.* It will be evident, from this statement, that the Hanwell Lunatic Asylum is one of the largest establishments of the kind in Great Britain; and that considerable interest attaches to it both in an economical and a scientific point of view.

The cost of each patient was, on an average, 7*s.* 3*d.* a week; 3*s.* 10*d.* having been expended for provision, including 1*s.* 1½*d.* for meat; and 1*s.* 3*d.* for flour.

We are glad to perceive, from the report of the Resident Physician, that the diet has been improved. The amount of solid food has been increased. The nature of the change will be seen in the subjoined statement of the amounts of solid and fluid food in the old diet table and the new.

Weekly proportion of Solid and Fluid Food.—Old Diet Table, solid food per week, 160 ounces; fluid, 20½ pints. New Diet Table, solid food per week (men), 194 ounces; fluid, 16 pints. Do. do. (women), solid, 172 ounces; fluid, 19½ pints.

Of the 34 ounces of increase in the solid portion of the mens' diet, 8½ consist of cooked meat, 6 of bread, and 14 of cheese. The substitution, for gruel, of a tea breakfast for the women, and a supper of bread, cheese and beer for the men, is said to have given much satisfaction.

It appears to be pretty well established, that fewer persons die, and that recovery is more rapid, in institutions where the patients enjoy a nutritious diet, than where they are kept at the starving point. The water-gruel slop frequently gives rise to diarrhœa; and it seems impossible to preserve the inmates of *one large establishment* in health, on a diet which sustains the life and strength of the agricultural peasantry living in detached cottages.—*London Lancet.*

Medical Miscellany.—Dr. Howe's abdominal supporter has what is termed a V, instead of a spiral spring, as remarked two weeks ago in the Journal, by mistake.—Mr. Phelps, the surgical instrument maker, of Court street, manufactures wooden legs so admirably, that it seems impossible to make them more perfect.—A memoir of the late Dr. John S. Bartlett, of Marblehead, embracing his controversy with the Mass. Med. Society, it is insinuated, if published, will show him a martyr and the Society a monster of oppression!—The private hospital of Dr. Levert, of Mobile, not quite ready for the reception of patients, was prostrated by a hurricane on the 24th of March.—It turns out that the Shakers were falsely accused of maiming two boys, mentioned last week.—The plague has again appeared at Smyrna, exciting the usual alarm, to strangers as well as natives.—The late Dr. Parrish, of Philadelphia, is said to have left $150 a year for the support of a faithful horse, who is to fare sumptuously for the remainder of his life, without labor. More lucky than most horses who have physicians for masters.—Will not some physician at Cornish, N. H., Windsor, Vt., or in the neighborhood, transmit a report of the remarkable case of *mollities ossium* in the person of a Miss Harrington?—Fifty-seven gentlemen received the degree of Doctor of Medicine at the close of the lecture term of the Jefferson Medical College, March 6th. An honorary degree of M.D. was conferred on Dr. Joseph Milnor, of Allentown, N. J. A valedictory was delivered by Prof. Green.—No. 7 Vol. 2d, of the American Phrenological Journal is excellently well filled with original matter.—Dr. Williams's little work on Medical Jurisprudence is properly appreciated in Europe.—Mr. L. N. Fowler is giving a second course of phrenological lectures in New York.—Arthur Wake, of North Carolina, is now in his 119th year, and in good health. —The British and Foreign Medical Review for January, now edited solely by John Forbes, M.D., contains many articles of unusual interest. —Dr. Bell's Select Medical Library, for March, comprises a continuation of Hunter's valuable work on the blood.—Several cases of spontaneous salivation were referred to at a late meeting of the Westminster Medical Society; cases, also, having been caused by lead, were related by two of the members.

To Correspondents.—An interesting communication from Europe, by Dr. Harlan, of Philadelphia, has been received, and its publication will be commenced next week.

Died,—In Enfield, Ms., Dr. Alonzo Claggett, 28.

Number of deaths in Boston for the week ending April 11, 30.—Males, 16—females, 14.

Of consumption, 2—smallpox, 8—insanity, 1—teething, 1—inflammation of the lungs, 1—marasmus, 1—infantile, 2—dropsy on the brain, 1—dropsy, 1—lung fever, 1—scarlet fever, 2—old age, 2—intemperance, 1—inflammation of the brain, 1—decline, 1—coxalgia, 1—asphyxia, 1—hæmorrhage of the lungs, 1—paralysis, 1.

SEVERAL THOUSAND COPIES OF DESLANDES' TREATISE ON THE DISEASES PRODUCED BY EXCESSES, have been sold the past year. Price 50 cents. For sale by OTIS, BROADERS & CO., No. 120 Washington street (up stairs).

Extract from the Boston Medical and Surgical Journal.—"If it were once freely circulated, the tendency would be beneficial, because, like an alarm gun, it would give warning in season to arrest a threatening danger."

Extract of a letter from Dr. Woodward, Superintendent of the Insane Hospital at Worcester.—"That it is a most frightful source of ill health and fatal disease with the young, I have no doubt; I hope, therefore, it will go into extensive circulation."

Extract of a letter from Dr. J. W. Francis, New York.—"The volume as now published will prove eminently useful, and deserves the consideration of all to whom is committed the responsible trust of moral and physical education."

Extract of a letter from Dr Doane, New York.—"The subject is extremely important, and one too much overlooked by our profession generally, and the evils of the vice are not appreciated by our community."

Extract of a letter from Dr. Winslow Lewis, Jr., Boston.—"To none can the work do harm, and to many it may give rise to that deep self-trust which will forever free them from this fatal vice."

For sale in Lowell, by E. A. Rice & Co. In Nashua, by Buffum & Gill. In Salem, by H. Whipple.

April 15—3t

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Boston, Nov. 20, 1839. ep1meop6m

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Jan. 29—ep1meoptf

TREATMENT OF HERNIA.—E. W. LEACH, M.D. Office No. 134 Hanover street, Boston.

Reference.—John C. Warren, M.D.; George C. Shattuck, M.D.; John Ware, M.D.; John Jeffries, M.D.; Edward Reynolds, M.D., Boston. W. J. Walker, M.D., Charlestown.

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